

NOTES ON AUSTRALIAN COLEOPTERA, WITH DESCRIPTIONS OF  
NEW SPECIES. II.

By CHARLES OKE.

(Twenty-five Text-figures.)

[Read 29th June, 1932.]

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RHYSODIDAE.

RHYSODES BURNSI, n. sp. Text-fig. 1.

Dark piceous; nitid. Antennae rather strongly, tarsi sparsely, clothed with yellowish setae. Golden coloured trichomes surrounding foveae near apex of pronotum, anterior angles of prosternum and base of head.

Head triangular; lateral lobes large, lightly hollowed in front, entire behind; median lobe starting from basal third of lateral lobes, widened between antennae and narrowed in front, with a fovea in front at apex, and one on either side, just behind apex. Eyes small, elongate, lateral. Antennae rather short and thick; first segment large, second to tenth moniliform, transverse, eleventh sharply conical, without transverse suture. Prothorax longer than wide, with three longitudinal sulci running into a transverse groove in front, the medial sulcus lightly dilated near basal third, the outer sulci widened and subfoveate at base, foveate at apex, and with a golden trichome. Elytra elongate, strongly arcuate at base, shoulders produced forward; each elytron with three deep sulci, the first vanishing before apex, the second meeting at apex, the third narrow and becoming very faint before apex; the striae with moderate sized, elongate punctures. Anterior tibiae with a small, blunt spur at apical fifth and a long thin spur at apex; intermediate and posterior with two small spurs at apex. Under surface smooth and shining. Metasternum deeply sulcate. Length, 7 mm.; width, 1.40 mm.

*Hab.*—N. S. Wales: Mt. Wilson (C. Oke), in log with ants.

Of the species given in the table (These PROCEEDINGS, 1904) it is nearest to *R. mirabilis* Lea, from which it differs, according to the figure and description, by the shape of the antennal segments, in the median ridges of pronotum narrower than the laterals, the foveae near apex and prothorax not so rounded off at each end. In some respects it is close to the description of *R. frontalis* Grouv., but the second and third antennal segments are the same shape in the present species, the apex of elytra is different and Grouvelle does not mention the foveae on the pronotum.

So far no Australian species of Rhysodidae has been recorded as an inquiline of ants. My unique specimen of this species was taken from a log in which was a numerous colony of ants. Unfortunately none of the ants were kept for identification, as the presence of the beetle was thought to be accidental. But the presence of well defined trichomes surrounding the foveae on the pronotum and on the prosternum would seem to point definitely to this species being a myrmecophile. The trichomes are well developed and are somewhat like those seen in some species of the Chlamydopsini.

I have much pleasure in naming this species after my friend Mr. A. N. Burns, in whose company I found this very interesting beetle. Type in Coll. Oke.

RHYSODES PLANATUS Lea.

As no exact locality for this and the following species has been given, it will be of interest to know where they occur.

*Hab.*—Victoria: Belgrave (C. Oke).

RHYSODES TRICHOSTERNUS Lea.

*Hab.*—Victoria: Macedon (H. W. Davey, C. Oke).

RHYSODES ICHTHYOCEPHALUS Lea.

*Hab.*—N. S. Wales: Dorrigo (C. Oke). First record from this State.

PAUSSIDAE.

ARTHROPTERUS ABNORMIS, n. sp. Text-fig. 2.

Reddish-castaneous, tarsi almost piceous. With very short clothing, longer and more noticeable on humeral angles, sides of prothorax, head and basal segment of antennae.

Head with irregular punctures, becoming dense on base; with two vague, longitudinal impressions between eyes; sides lightly produced behind eyes. Antennae with sides densely punctate and less polished than along middle; with only 9 visible segments; 1 subquadrate, lightly produced on inner apical angle, 2 invisible, 3-8 strongly transverse, 9 cuneiform, and only on inner side of middle, 10 large, a little longer down middle than 7-8 combined, notched on outer edge, which is longer than inner. Prothorax lightly transverse, widest near apex, strongly rounded to apex, lightly narrowed to base; median impression rather strong, not reaching base or apex; margins lightly reflexed near base; punctures fairly dense but irregular. Elytra about four times as long as prothorax; punctures of irregular size and shape, and more conspicuous near suture, where there are vague remnants of three or four striae on each elytron. Hind tibiae about two and a half times as long as wide, with the outer edge produced into a sharp point. Length, 9 mm.

*Hab.*—Victoria: Riddell (C. Oke).

Quite an ordinary looking species of *Arthropterus* except for the antennae, which almost suggest a teratological origin, only that both are exactly alike. Rather like the species I have as *A. howitti* Macl. in appearance, but the thorax smaller and shorter, and the elytra, besides antennae, different.

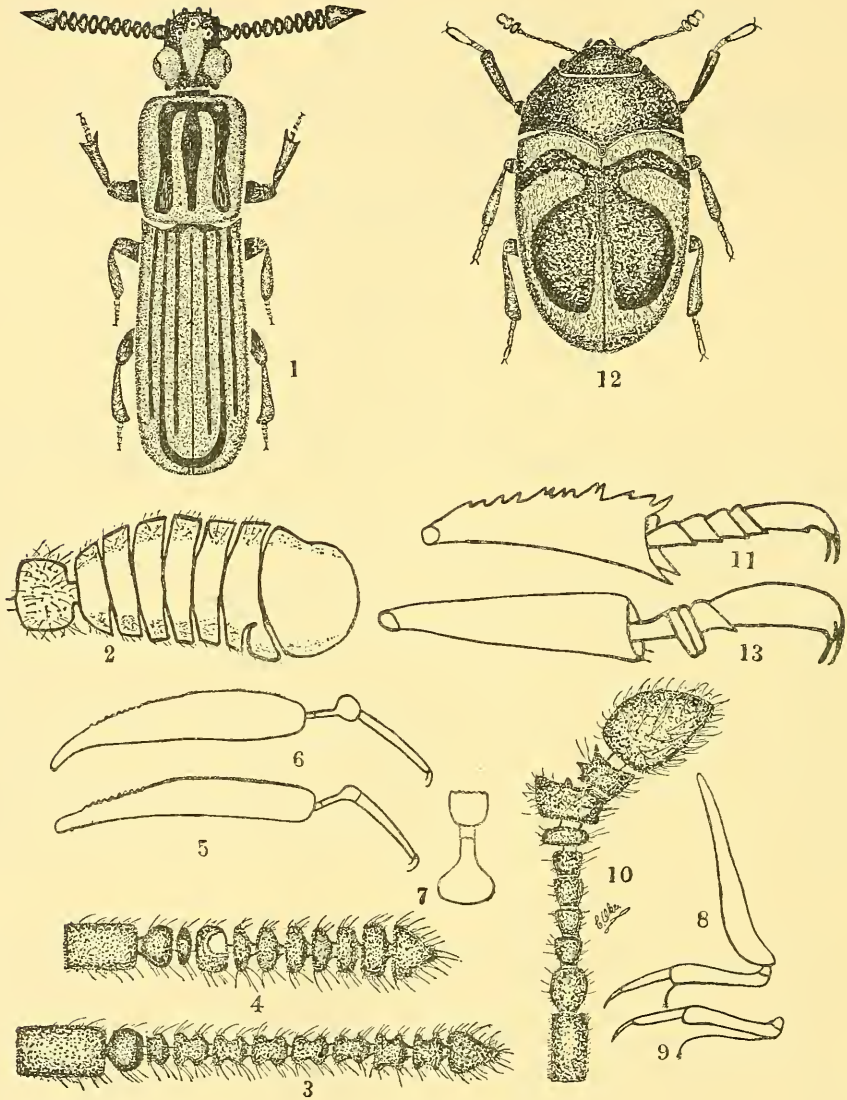
There are only nine visible segments, though I presume that the second is buried and invisible as usual; of these the subapical is only on one side of the middle. Possibly, as the presence of ten visible segments is a primary character of *Arthropterus*, a new genus should have been proposed for it. Type (unique) in Coll. Oke.

PSELAPHIDAE.

FARONINI.

SAGOLA RUGICORNIS, n. sp. Text-fig. 3.

Reddish-castaneous, tarsi paler. Moderately clothed with fairly long, reddish pubescence, with a few longer ones scattered about, becoming more noticeable near apex of abdomen.



Text-figs. 1-13.

1.—*Rhyssodes burnsi*, n. sp. 2.—*Arthropterus abnormis*, n. sp. Antenna. 3.—*Sagola rugicornis*, n. sp. Antenna. 4.—*Sagola foveicornis*, n. sp. Antenna. 5.—*Batrisodes clavitarsis*, n. sp. Tibia and tarsus: usual view of tarsus. 6.—*Batrisodes clavitarsis*, n. sp. Tibia and tarsus: side view of tarsus. 7.—*Batrisodes clavitarsis*, n. sp. Tip of tibia and basal segments of tarsus, all that can be seen from this angle. 8.—*Eupines impedita*, n. sp. Tibia and tarsus. 9.—*Eupines impedita*, n. sp. Same tarsus with plate moved away from joints. 10.—*Bryaxis macquariensis*, n. sp. Antenna of male. 11.—*Enneboeus fossoris*, n. sp. Tibia and tarsus. 12.—*Enneboeus tarsalis*, n. sp. 13.—*Enneboeus tarsalis*, n. sp. Tibia and tarsus.

♂. Head with two small interocular foveae and a large impression towards front, separating the bases of the antennal tubercles, which nearly meet at their apices. The frons, antennal tubercles and antennae with large rugose punctures. Antennae longer and stouter than usual; segment 1 very stout, as long as next three combined, 2 subglobular, 3 smallest, 3-10 constricted in middle, 4-8 longer than wide, 9-10 lightly transverse, 11 subconical. Prothorax cordate, widest near middle; a fairly large medial fovea near base, connected with the lateral foveae by an impressed line; with fine sparse punctures. Elytra with punctures as on prothorax; sutural striae with a fovea at base and entire; discal striae represented by a small round fovea at base, and then a large elongate impression; an elongate fovea between sutural and discal striae. Abdomen with third segment longer than 1-2 combined; under surface with a large impression extending from third segment to apex. Metasternum convex, with a narrow medial sulcus. Middle trochanters compressed and produced into a blunt tooth. Length, 3.5 mm.

*Hab.*—Victoria: Warburton, Mt. Donna Buang (4,080 ft.), (C. Oke).

This species is remarkable for its peculiar antennae, which are quite unlike those of any other *Pselaphid* known to me. Each of the segments 3-9 is like a miniature cotton reel, roughly punctured, and, under a half-inch lens, appears to be covered with minute papillae. Type in Coll. Oke.

#### SAGOLA FOVEICORNIS, n. sp. Text-fig. 4.

Reddish-castaneous, suture infuscated, palpi almost flavous. Well clothed with rather long, reddish, semi-decumbent pubescence, with a few longer, stiff, erect setae scattered about.

Head subquadrate, with a large circular impression on apical two-thirds, connected with the base by two fine lines. Antennae stouter than usual, segment 1 twice as long as wide, 2 obconical, 3-10 transverse, 3 very small, 4 twice as long as, and slightly wider than, 5, with an impression or notch on its upper surface, 6-9 subequal, 10 a little wider, 11 a little longer, with a small, produced apex. Prothorax cordate, with a medial impression near base, connected with the lateral foveae by an impressed line. Elytra longer than wide; sutural area depressed; sutural striae well impressed and entire, with a fovea at base; discal striae represented by a very small fovea at base and a fairly large, elongate impression behind; a small fovea between sutural and discal striae; with fine, scattered punctures. Abdomen with third segment as long as 1-2 combined; convex beneath; metasternum strongly convex. Intermediate trochanters rather feebly compressed. Length, 2.60 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

I believe the unique specimen from which this species is described to be a male, as the apex appears to be furnished with a small, indistinct operculum, though the metasternum and base of abdomen seem to be those of a female. The species is readily distinguished from the described species by the fourth joint of the antennae. Type in Coll. Oke.

#### EUPLECTINI.

##### MACROPLECTUS CALCARATUS Raffr.

Some specimens which I have identified as belonging to this species agree in all particulars with M. Raffray's detailed description except: "Caput . . . sulcis duabis obsoletis", and "pedum intermediorum . . . tibiis ad apicem incrassatis et valde calcaratus". In my specimens the frontal sulci are certainly not obsolete,



and, when seen from in front, they appear unusually deep. The intermediate tibiae are slightly thickened to apex, but the spur is small and, as it is almost underneath the tibiae, on the inner side, it might easily escape notice at a casual glance.

The ♀ is slightly smaller than the ♂, with the head smaller and the legs unarmed.

*Hab.*—Victoria: Belgrave, Warburton (C. Oke).

MACROPLECTUS TUBERCULATUS, n. sp.

Reddish testaceous. Clothed with short yellowish pubescence, behind each coxa with thick pearly squamose pubescence. With fine indistinct punctures.

♂. Head large, transverse, wider than prothorax, narrowed in front; two large interocular foveae, opening in frontal sulci, which are deeply impressed and meet in front, the space between convex; antennary tubercles lightly raised; notched at base; foveate at base of ventral surface and carinate down centre. Antennae with joint 1 large, 2 smaller, 3–10 moniliform, 8, 9, 10 lightly transverse, 11 ovate, base truncate, apex acuminate, about as long as three preceding combined. Prothorax cordate, strongly rounded on sides, more strongly narrowed to apex than base; transverse impression expanded in middle and a large foveate impression on either side, a narrow longitudinal impression on centre of disc, indistinctly connected with the transverse impression. Elytra longer than wide, sutural stria distinct, a sulcate impression at position of dorsal stria, traceable to middle; base with four foveae. Abdomen with first three dorsal segments equal; first with two short carinules dividing width into three equal parts; ventral segments unequal, 2 long, 3, 4, 5 short, 6, 7 large, operculum oval; second with two round impressions behind coxae, from which a small tubercle protrudes, 3 with two small transverse impressions. Metasternum large, bifoveate close to middle coxae, behind these are two prominent tubercles, curved posteriorly; declivous at apex. Anterior tibiae almost straight; intermediate curved and with a spur near apex; posterior strongly curved and spinose at apex.

♀. Similar to ♂ but sternum simple, abdomen convex beneath and legs unarmed. Length, 1.80 mm.

*Hab.*—Victoria: Belgrave and Evelyn (C. Oke).

Very like *calcartatus* on upper surface, but different on ventral, as in that species the sternum and abdomen are simple and its intermediate trochanters are armed. The tubercles on the metasternum are very distinct, when looking straight down on them they appear as two black lines, but when seen from the sides they are seen as two prominent projections with their tops strongly curved backwards. The tubercles on the abdomen are much the same shape but smaller. Types in Coll. Oke.

BATRISINI.

BATRISODES CLAVITARSIS, n. sp. Text-figs. 5, 6, 7.

Bright castaneous. Well clothed with moderately long, yellowish pubescence, with a few longer setae scattered about. With fine, disperse punctures.

Head subquadrate, with two interocular foveae opening in front into a large triangular depression between the antennae. Antennae with all the segments elongate. Prothorax cordate, strongly rounded on the sides, widest in front of middle; disc strongly convex, with a faint groove on either side, with four foveae on the base and one on either side. Elytra rounded on the sides, strongly

narrowed to base, where there are four large foveae; sutural striae entire, discal strong at base and traceable to about the middle. Abdomen with two short carinules on the base, each a little nearer middle than the sides; under surface flattened, with the apex lightly impressed. Metasternum sulcate and a little excavate posteriorly. Legs fairly long. Middle femora a little thicker than the others. Hind tibiae compressed and widened near middle. Posterior tarsi with apex of second segment suddenly widened near its middle and bent downwards; third cylindrical as usual. Length, 2 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

There are five specimens in front of me all belonging to one sex, and I believe they are males. I have one specimen which is certainly a female and probably the female of this species, as it was taken with the above males and agrees in all particulars with them, except that its hind tarsi are quite ordinary and its abdomen is convex.

The hind tarsi are a remarkable shape, the widened part of the second segment being circular in outline, with the third segment bent underneath, so that the beetle would appear to walk on what should be the upper surface. Types in Coll. Oke.

BATRISODES GRACILICORNIS, nom. nov.

(= *B. tenuicornis* Lea, nom. praeoc.)

The name *tenuicornis* was occupied by Raffray (1904) for a species from Sumatra when proposed by Lea (1910).

The species is now recorded from Victoria: Mitchell Gorge (Oke).

BRACHYGLUTINI.

RYBAXIS VAGUS, n. sp.

Ferruginous, elytra and femora reddish-castaneous, antennae castaneous, segments 9–10 piceous, 11 very pale. Rather sparsely clothed with short, pale pubescence.

♂. Head a little longer than wide; with a large round impression, open in front, between antennae, and two large interocular foveae. Antennae rather stout and long; segment 1 cylindrical, stout, as long as next two combined, 2 ovate, 3–8 elongate, 3–5 equal, 6–8 diminishing, 9 scarcely longer than 8 but wider, 10 much larger, 9–10 obconic, 11 large, ovate-truncate. Prothorax cordate, widest in front of middle; lateral foveae large, medial fovea hardly visible, transverse impression strongly arcuate. Elytra about as wide at apex as long, narrowed to base, apices lightly rounded; sutural striae entire, discal nearly straight, traceable to near apex; shoulders raised; with minute, disperse punctures. Abdomen without basal impressions or carinae beyond elytra; under surface with a narrow carina down second segment; a thin, compressed tubercle on apex of third segment and overhanging the fourth; the apical segment with a large impression. Metasternum deeply excavate, sides of excavation carinate and produced into an obtuse tooth overhanging the hind coxae. Femora fairly thick. Anterior tibiae sinuate; intermediate with a strong, blunt, apical spur; posterior thickened to apex, where there is a long thin spur.

♀. Differs in having the antennal segments 9–10 thinner; metasternum not so excavate and without tubercles; abdomen simply convex beneath; middle tibiae without spur, but posterior tibiae spurred. Length, 2.40–2.75 mm.

*Hab.*—Victoria: Mitchell Gorge, Warburton, Fern Tree Gully (C. Oke); N. S. Wales: Dorrigo (C. Oke).

A very distinct species, probably nearer to *flavipes* than any of the described species, from which it differs in being of an entirely different colour, with armed metasternum and the hind tibiae spurred at apex. The spur of the hind tibiae is very thin but fairly long, and on some specimens it appears to be composed of several spines, or perhaps setae, compressed together. Types in Coll. Oke.

RYBAXIS TROCHANTERIS, n. sp.

Colour, clothing and upper surface as in preceding species.

♂. Metasternum widely flattened, with an oblique carina from middle coxae to beyond posterior coxae, a transverse carina between the latter; with an obtuse tubercle overhanging the posterior coxae; and a minute medio-basal tooth. Abdomen with the apices of segments 2 and 3 having a small, compressed sharp tooth overhanging the following segments. Intermediate trochanters unusually large and with a short, blunt tooth. Anterior femora lightly inflated; intermediate rather strongly inflated and hollowed on inner edge. Anterior tibiae with a minute tooth on inner side of apex; intermediate thick, constricted near base, with a small, triangular tooth about the middle on inner side, thence cut away to apex, where there is a small tooth; posterior with a long thin spur near apex.

♀. As in *R. vagus*, n. sp. Length, 2.50 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

This species is exactly like the preceding one in appearance, indeed, I believe it is impossible to say to which species a female might belong, but, having caught a specimen of each sex close together I am presuming they belong to the same species. However, the two species are very different by the male characters in the legs and metasternum. The middle trochanters are larger than I have seen in any other *Pselaphid*. Types in Coll. Oke.

EUPINES IMPEDITA, n. sp. Text-figs. 8, 9.

Castaneous; elytra reddish, head almost black, ninth and tenth joints of antennae palest. Clothed with pale pubescence, more conspicuous on abdomen and under surface.

♂. Head with two round interocular foveae, vaguely impressed in front. Antennae with first joint stout and long, 1-4 decreasing in length, 5 cylindrical, as long as 1, 6-7 about same length as 3, 8 quadrate, small, 9 large, trapezoidal, 10 shorter than 9, transverse, 11 fairly large, ovate. Prothorax strongly rounded on the sides, widest in front of middle. Elytra with sides rounded. Metasternum flattened, entirely sulcate, with a few scattered punctures. Abdomen with second ventral segment strongly punctured, flattened in middle and with two minute tubercles, bent forward, close together, just behind its centre. Anterior trochanters acutely armed. Posterior tarsi with first joint minute, second long, about one-third length of tibiae, third a little shorter than second; from base of first joint, on under surface, a thin plate, or appendage, extends beyond second articulation and is then curled downwards; the other tarsi somewhat similar, but not so marked, nor so long.

♀. Differs in having the fifth joint shorter and the club smaller; by the metasternum not entirely sulcate and abdomen convex on the ventral surface. Length, 1.5 mm.

*Hab.*—Victoria: Warburton, Frankston (C. Oke), in tussocks.



This species is evidently allied to *E. tarsalis* Lea, and probably the two should be separated from *Eupines* in a new genus. Lea says of the second joint of the tarsi, "about one-third the length of tibiae and inflated to one side". This appears to be the case in the present species, as normally the plate is adpressed to the tarsus, but by careful manipulation the plate can be separated from the tarsus, and then it is seen to be a free plate joined only at its base. Type in Coll. Oke.

BRYAXIS MACQUARIENSIS, n. sp. Text-fig. 10.

Pale reddish-castaneous, appendages paler; head black and front of prothorax stained with black. Rather sparsely clothed with minute, pale pubescence.

♂. Head subquadrate, flat on vertex; with two fairly large interocular foveae and a narrow transverse impression between antennae. Antennae with segment 1 cylindrical, 2 oval, 3-6 longer than broad, 7 transverse, 8 large, produced to one side where 9 is joined, 9 transverse, smaller than 8, with two small teeth on inner edge, 10 largest, ovate. Prothorax cordate, rounded on sides, widest in front of middle. Elytra short, without impressions, but with scattered, moderate-sized punctures. Metasternum impressed posteriorly. Abdomen widely sulcate from middle of second segment to apex; the third segment with a granule on either side within sulcus, these furnished with a thin pencil of hairs, which is curved and directed forward. Trochanters unarmed. Anterior tibiae bisinuate (almost armed in middle); intermediate and posterior thickened towards apex and lightly curved. Length, 1 mm.

*Hab.*—N. S. Wales: Port Macquarie (C. Oke).

The subgenus *Bryaxis* of *Eupines* appears to be poorly represented in Australia as this is only the third species to be described, but each has remarkable antennae with one or more of the apical segments unevenly placed on the axis of the appendage. Only the ninth and tenth segments of *B. implumis* Lea are mentioned in the description and these show that they are very different from my insect. In his notes Mr. Lea says that the fifth joint is very different from that of *E. obliqua*, but no comparison is given. The punctate elytra seem to be at variance with the genus, though otherwise the characters are quite in keeping with those of the genus. Type (unique) in Coll. Oke.

TYRINI.

PALIMBOLUS FASCICULUS, n. sp.

Ferruginous, most of elytra and legs reddish-castaneous, apical segment of antennae pale. Densely clothed with long, pale and black setae; all foveae filled with golden pubescence.

♂. Head small, attenuate in front; with two interocular foveae, and an elongate impression in front; with moderate, but not very close, punctures. Antennae stout and coarsely punctate; segment 1 scarcely as long as next two combined, 2 subglobose, 3 obconical, 4-10 transverse, 6-9 slightly longer on inner edge than on outer, 11 large, longer than 9-10 combined. Prothorax suddenly widened, and carinate on sides, in front of middle; with a large medio-basal fovea and three foveae on either side; punctures as on head. Elytra with four foveae on the base; sutural striae entire, discal striae deep at base and vanishing about middle. Metasternum with a large excavation posteriorly. Abdomen on under surface hollowed from base to apex, the apex curved under and bears, on either side of subapical segment, a large reddish-golden fascicle.



Posterior coxae somewhat produced. Intermediate and posterior trochanters strongly armed. Posterior femora inflated and with a small tooth on inner edge. Intermediate tibiae with a small apical spur; posterior with a strong notch at apical third, the side of notch produced into a strong spur. Anterior tarsi with inner claw trifold.

♀. Antennae with segments 2-3 globose, 4 larger, quadrate, 5-8 transverse, decreasing, 9-10 large, transverse and with 11 forming a large club. Metasternum lightly excavate. Legs not armed. Length, 2.85 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

This species should be easily recognized by its stout antennae, thorax, hind legs and abdomen. The antennae are stouter than in *robusticornis*. The spurs on hind tibiae are similar to those of *mirandus*, but the femora are thicker and with a small tooth near the middle of inner edge. From *metasternalis*, to which it is probably nearest, it differs, by description, in having the middle trochanters and the hind femora armed, the metasternum not armed and its abdominal fascicles. Types in Coll. Oke.

#### PALIMBOLUS EXCAVICORNIS, n. sp.

Dark castaneous; elytra, legs and three apical segments of antennae reddish. Densely clothed with long, luteous pubescence; foveae filled with short, glistening pubescence.

♂. Head with two round interocular foveae close to the eyes; antennal tubercles strongly raised and punctate in front. Antennae very stout, with large, close punctures; segment 1 longer than next two combined, 2-10 transverse, 2-8 diminishing in length, 9-10 larger, subequal, 11 very large, as long as three preceding combined, with a large excavation on lower surface. Prothorax subangulate, at widest part, in front of middle; with an elongate medio-basal impression, and two foveae on either side; some sparse punctures near base. Elytra arcuate at base; sutural striae entire; discal striae deeply impressed near base and vanishing beyond middle; each stria with a fovea at base. Metasternum widely and deeply excavate; with an obtuse tubercle behind intermediate coxae. Abdomen flattened. Posterior coxae notched and produced into a large blunt tooth, overhanging trochanters. Posterior trochanters produced into a conical tooth at base. Posterior femora strongly inflated, arched, with a sudden constriction near apex. Intermediate tibiae with a small apical spur; posterior with two small, blunt teeth near base and a very small, sharply conical tooth near middle. Anterior tarsi with inner claw trifold.

♀. Differs from the ♂ in having the antennae a little thinner and without the excavation on apical segment; the metasternum less excavate; abdomen convex and legs unarmed. Length, 3 mm.

*Hab.*—Victoria: Lorne (C. Oke, in moss, and in moss collected by Mr. C. J. Gabriel).

The hind tibiae of this species will distinguish it from the previously described ones. The basal teeth are small and close together, but are very distinct, though the median tooth is smaller and might be overlooked. The antennae are slightly thicker than in *robusticornis* with the apical segments paler and the eleventh segment is decidedly larger and more deeply excavate. Types in Coll. Oke.

## HAMOTOPSIS CARINATUS, n. sp.

Ferruginous; elytra and appendages castaneous. Rather densely clothed with reddish pubescence.

Head with vertex quadrate, produced in front; with two round interocular foveae and an elongate one in front; with fairly large, close punctures. Antennae long and thick; segment 1 stout, cylindric, 2 thinner, subquadrate, 3 elongate, obconic, 4-8 globular, 9-10 much larger, scarcely transverse, 10 larger than 9, 11 very large, elongate-ovate, more rounded on outside edge than on inner; the whole punctured and with minute papillae. Prothorax about as wide as long, strongly rounded on the sides, widest in front of middle, a little narrower at apex than base; medial fovea small and connected with the large lateral foveae; a carinule from transverse impression to base; punctures larger than on head. Elytra strongly arcuate at base, with the shoulders slightly produced; sutural striae entire, discal wide at base, but vanishing before middle; punctures finer than on head. Abdomen with three basal segments equal and the three with an entire, longitudinal, medial carina. Metasternum deeply excavate posteriorly. Under surface with fine, disperse punctures. Legs coarsely and closely punctate. Femora thin, tibiae lightly sinuate. Length, 2.30 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

On the under surface of the head are two strong projections; these appear to be the ends of the cardo, but only having a single specimen I hesitate to make certain. Differs from the description and figure of *H. australasiae* Raffr. in the formation of the antennae, in having the three basal segments of the abdomen carinate, and in the large, close punctures of the head and prothorax. Type in Coll. Oke.

## SCHISTODACTYLINI.

## SCHISTODACTYLUS BREVIPENNIS Lea.

(= *S. armipectus* Wilson, ? *S. foveiventris* Wilson.)

This species is widely spread in Tasmania and Victoria, and is quite common in the Dandenong and Warburton Ranges. It also occurs in the Blue Mountains in New South Wales.

Wilson, in redescribing the species as *armipectus*, relied on the spines on the prosternum to differentiate his species from *brevipennis*. On a recent visit to Adelaide the late Mr. A. M. Lea kindly allowed me to examine his type and some cotypes in his collection, and these all had the spines on the prosternum, though they were not mentioned in his description. I also have several specimens from Tasmania and these all have the spines. In January I obtained specimens of this species at Wentworth Falls, and this raises some doubts as to whether *foveiventris* is not the same as *brevipennis*. Mr. Wilson had to float off and clean his specimen; in doing this it would be very easy to lose the apical seta from each palp, and the description of the abdominal fovea does not differ from quite normal males. Some new localities for this species are: Tasmania: Magnet in moss, Stanley in grass (C. Oke), Launceston (H. V. Hickman); Victoria: Healesville, Beechworth, Ballarat, Bairnsdale, Fern Tree Gully (Oke), Emerald (J. E. Dixon, E. Nye, Oke); N. S. Wales: Wentworth Falls (Oke).

## BYRRHIDAE.

## PEDILOPHORUS FASCICULATUS Lea.

A specimen of this species from Lorne, Vic. (C. Oke), agrees very well with the type, except that the clothing on the pronotum is scarcely fasciculate, it is

dense and matted together. On a second specimen, which appears to be abraded, the clothing is sparser and is nowhere fasciculate.

Now first recorded from the mainland.

*PEDILOPHORUS ATRONITENS* Lea.

This species was described from a unique specimen from Lorne, Vic., but it is not at all uncommon in that district, as I have taken a fair number of specimens, all being found in moss.

Most of the specimens are apparently not so dark as the type, as they have the disc of pronotum and elytra diluted with red, and only their edges are black.

*PEDILOPHORUS COMATUS*, n. sp.

Bronze-black; under surface black, legs piceous, mouth parts, antennae (two basal segments excepted) and tarsi reddish. Upper surface with long black hairs mingled with shorter brick-red hairs; under surface with short greyish pubescence.

Head rounded in front, with fine, close punctures. Antennae with third segment much longer and thinner than second, as long as fourth and fifth combined, the last four forming a moderate club. Prothorax transverse, very convex, with fine, subreticulate punctures. Scutellum distinct. Elytra strongly and evenly convex; punctures as on prothorax but becoming less distinct posteriorly. Under surface with small, dense punctures. Length, 3.5-4.5 mm.

*Hab.*—Victoria: Bacchus Marsh (C. Oke, in Termite's nest), Anakies (Rev. E. Nye, E. E. Nye, C. Oke), You Yangs (E. Fischer, Oke), Mt. Blowhard, at 6,000 ft. (in Coll. Lea).

This species is nearest to *P. mixtus* Lea, but differs in being larger, less metallic, with the clothing longer and black and reddish, instead of black and whitish; the third segment of antennae is also longer. The reddish hairs are somewhat golden in certain lights and have an obliquely vittate appearance, especially on the pronotum. On the type and some other specimens the legs are quite piceous, but in some others they are reddish. Types in Coll. Oke. Paratypes in South Australian Museum and Colls. Lea, Nye, Oke.

TENEBRIONIDAE.

*COTULADES PILOSUS*, n. sp.

Black; legs and mouth parts diluted with red. Clothed with long, black, hooked setae on upper surface, also with some short, white setae on front of head, legs and under surface, and forming two round premedial spots on elytra.

Head with coarse, dense punctures. Eyes small, prominent. Antennae fairly thick, third segment widest, decreasing to apex, apical segment small. Prothorax as long as wide, widest at apex, feebly decreasing to base; sides denticulate; with punctures a little finer than on head. Elytra widened to near apex, then suddenly narrowed to apex; with large, rough punctures. Under surface with rather large, sharp punctures. Length, 2.5-3.5 mm.

*Hab.*—Victoria: Beechworth (C. Oke).

A small species near *C. montanus* Bl. from which it differs by the prothorax not rounded on sides, its longer antennae, etc. On some specimens the elytral spots are very faint, but are fairly conspicuous on others. None of them show any signs of pale vittae on the prothorax. Type in Coll. Oke.



## ENNEBOEUS FOSSORIS, n. sp. Text-fig. 11.

Pitchy-brown, legs and antennae reddish. Clothed with short, adpressed cinereous pubescence, this appearing to form a pattern on elytra. The whole upper surface with close minute punctures, but obscured by the clothing.

Oblong-elliptic. Antennae slender, club light. Prothorax transverse, much narrowed to apex. Elytra with sides parallel to near apex, feebly trisinate at base; with rather small punctures forming definite striae. Tibiae moderately stout, with several spines at apex and spinose on outer edge, more strongly so on the anterior. Length, 4.25 mm.

*Hab.*—Victoria: Bendigo (C. Oke).

This species is at once separated from *ovalis* and *australis* by its spinose tibiae, these being evidently fossorial, which should, perhaps, exclude it from *Enneboeus*, but as I can find no other difference I prefer not to propose a new genus for it. The other three species are found under bark, generally on dead trees, but my specimens of this species were found under stones that were some distance, about fifty feet, from any vegetation other than grass. Types in Coll. Oke.

## ENNEBOEUS TARSALIS, n. sp. Text-figs. 12, 13.

Dark brown, with clypeus, front of pronotum, parts of elytra, basal joints of antennae and legs testaceous. Subnitid. Clothed with short, pale adpressed pubescence. Upper surface with very fine close punctures.

Oval. Head with a vague impression between eyes. Antennae reaching to middle of prothorax; last three joints forming a moderate club. Prothorax strongly transverse, much narrowed to apex; trilobed at base. Elytra trisinate at base, central sinus shorter and deeper than outer; with striate rows of rather small unevenly spaced punctures. Anterior tibiae non-spinose, others with a few spines at apex. Anterior tarsi in ♂ with joints stout and four basal joints transverse; in ♀ slender and longer. Length, 2.80–3.25 mm.

*Hab.*—Victoria: Emerald (C. Oke).

The pale markings on the elytra are a narrow mark across base, becoming larger on shoulders, an interrupted, sinuate, V-reversed shaped fascia, starting about middle of margin and produced forward towards, but not quite reaching, suture; from this mark to apex the margin is pale and the apical half of suture is very narrowly pale. There is quite a difference between the anterior tarsi of the sexes. That which I take to be the male has much stouter, though shorter, basal joints than the female, with a long stout apical joint. Types in Coll. Oke.

## ENNEBOEUS OVALIS Waterh.

This species occurs under bark, generally on dead wood, where I have taken it in Victoria at Pakenham and in the Dandenong Ranges, also in New South Wales, at Dorrigo. It has not been previously recorded from the mainland.

## PARATOXICUM NIGRICANS, n. sp.

Dark castaneous; base of head, pronotum and elytra dull black; clypeus and appendages reddish. Sparsely clothed with short, pale pubescence.

Head with fine, confluent, rugose punctures. Prothorax transverse, hind angles lightly produced; with fine, close punctures. Elytra elongate, almost parallel sided; with regular rows of small punctures, the interstices with fine,



almost microscopic, punctures. Under surface with fine punctures, a little coarser on flanks of metasternum than elsewhere, finely strigose on sides of prosternum. Anterior tibiae lightly dilated to apex. Length, 4 mm.; width, 1.5 mm.

*Hab.*—Victoria: Bairnsdale, Belgrave (C. Oke), Traralgon (F. M. Burnet, C. Oke).

A smaller and narrower species than *P. iridescens* Champ., with the seriate rows of punctures much smaller and the interstices with very fine punctures, instead of smooth. The upper surface in the type and other specimens is a dull "velvety" black, but on one specimen, from Emerald, Vic. (where I have taken *P. iridescens*), is ferruginous, with a pale bluish iridescence. It is probably immature. Type in Coll. Oke. Paratype in Coll. Burnet.

SEIROTRANA BURNETI, n. sp. Text-fig. 14.

Oblong-ovate, strongly convex, nitid. Black, upper surface with a bronze tinge; tarsi and apices of tibiae and antennae diluted with brown. Legs clothed with dingy pubescence, apices of tibiae on inner side and tarsi with bright reddish tomentum.

♂. Head with frontal impression deep and strongly procurved, just behind which are two small, round foveae; with fine, close punctures, the base and under surface, in addition, with fine, transverse striae. Eyes large, strongly transverse. Antennae stout; segment 3 about one and a half times as long as 4, 4 and 5 subquadrate, 6–10 transverse, 8–9 produced to a sharp point on inner side, 11 ovate. Prothorax transverse, semicircularly emarginate at apex, sides widely rounded, base almost straight, angles not produced; very finely margined all around; disc convex, medial line absent; an elongate foveate impression about middle of either side near margin; punctures as on head. Scutellum rounded behind. Elytra a little wider at base than prothorax, humeral angles rounded off; with eight striae on each elytron: the seventh and eighth joining near, but not reaching, the base, the striae narrow but fairly deeply impressed, with moderately small, close punctures; interstices with very fine, sparse punctures. Epipleurae with small, sparse punctures. The legs, including the coxae, and apex of abdomen with fine, close punctures, rest of abdomen smooth. Anterior tibiae straight; intermediate dilated from base to apex, but hollowed out on inner side about apical third; posterior dilated from the base to near middle, there strongly scooped out and then thickened again to apex; from the top of the angulation to the apex of the tibiae there is a sharp-edged carina, with a fine stria on either side of it.

♀. Differs in having shorter and thinner, submoniliform antennae and the tibiae almost straight. Length, 15 mm.

*Hab.*—Victoria: Traralgon (F. M. Burnet, C. Oke).

A very distinct species approaching *S. uniformis* Cart. in facies, from which it is separated by its antennae, tibiae and each elytron with eight, instead of eleven, striae. It is with pleasure I name it after my friend, Dr. F. M. Burnet, who kindly gave me a pair taken *in copula*. Types in Coll. Oke.

Possibly this species should have been referred to the New Zealand genus *Pheloneis*, the main distinguishing character of which seems to be "antennae articulis apicalibus, ultimo excepto, transversis". But as this only applies to the male in *burneti*, and as there is very little, if any, difference in the anterior

tarsi and the posterior intercoxal process of some *Scirotrana* and *Adelia* with which I have compared it, I think it is better put in *Scirotrana* as an aberrant species.

## PTINIDAE.

## DIPLOCOTES CRASSICORNIS, n. sp.

Ferruginous; head and prothorax darker than other parts. Sparingly clothed with short, yellowish pubescence; on the elytra this is confined to the punctures of the striae. Elytra, abdomen and two apical segments of antennae subnitid, the rest almost, or quite, opaque.

Head transverse behind antennae, rugosely sculptured. Eyes produced into a conical point on outer edge. Antennae very stout, segment 1 nearly as long as next three combined, 2 obconical, 3-9 moniliform, equal, 10 larger, 11 narrowly oval. Prothorax longer than wide, with a transverse groove near base, the groove produced forward and subfoveate at sides; a fine marginal line at base; sculpture as on head. Elytra oval; punctate-seriate, with a row of large punctures across the base. Sternum rugosely sculptured; prosternum carinate between coxae, with a small fovea at base; mesosternum deeply impressed in centre; metasternum flattened. Legs fairly long. Length, 2 mm.

*Hab.*—Victoria: Hattah (C. Oke) in nests of a small black *Iridomyrmex*.

Allied to *howittanus*, but darker, with the groove on the pronotum more strongly produced forwards on the sides, the sculpture coarser and the antennae much thicker than in that species, though the tenth segment is smaller in proportion. Type in Coll. Oke.

## ENDOMYCHIDAE.

## DAULOTYPUS UMBRATILIS, n. sp. Text-fig. 15.

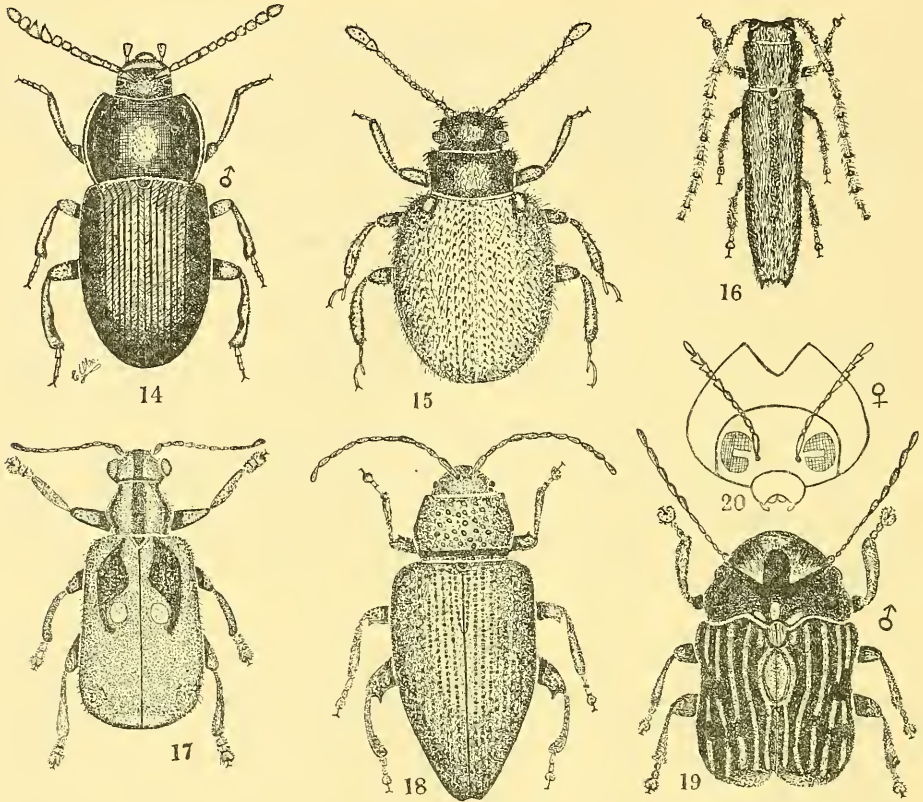
Reddish-flavous; head, prothorax and legs dark castaneous; antennae with segments 3-10 infuscated; tip of tenth, the whole of eleventh and the tarsi flavous. Well clothed with reddish, subdepressed pubescence; in addition with longer, erect setae.

Head transversely impressed behind antennae and with sparse, irregular punctures. Clypeus longitudinally impressed on either side; with a few punctures. Labrum bilobed. Antennae with segment 1 rather long; 3 decidedly longer than 4, a little longer than 2, shorter than 1; 5, 7, 9 subequal, longer than 4, 6, 8; 10 larger, lightly produced at apex on inner side; 11 ovate, more rounded and compressed on inner side. Prothorax nearly thrice as wide as long; sides narrowly margined and uneven; anterior angles rounded, posterior subdentate; a deep impression commencing near each hind angle and ending near apex; a narrow impression across base; with small, close punctures on sides, sparse and ill-defined on disc. Scutellum small, transverse. Elytra wider than thorax at base, widest just before middle, sides distinctly margined; shoulders rounded, a little raised; with regular rows of distinct punctures. Abdomen with first segment nearly as long as next four combined, the sixth very small, not incurved. Legs long, thin. Length, 3.25 mm.

*Hab.*—Victoria: Fern Tree Gully (C. Oke), in dark, shady places.

Of the three previously described species, the present one is nearest to *D. minor* Lea, but differs from a specimen of that species which I obtained at Dorrigo,

N. S. Wales, by its shorter and thicker antennae, the sides of the prothorax not quite the same, and the colour of the pronotum and head is not black. Type in Coll. Oke.



Text-figs. 14-20.

14.—*Seriotrana burneti*, n. sp. ♂. 15.—*Daulotypus umbratilis*, n. sp. 16.—*Itheum robustum*, n. sp. 17.—*Austrolema vitinea*, n. sp. 18.—*Microdonacia terricola*, n. sp. 19.—*Brachycaulus minor*, n. sp. ♂. 20.—*Brachycaulus minor*, n. sp. ♀

In figure 14 the left antenna is drawn as viewed from the side.

#### CERAMBYCIDAE.

##### TRITICOSMIA ARMATA, n. sp.

Black, elytra yellow-ochre, sides infuscated. Head with fairly long setae, more numerous on under surface. Sternum and abdomen with fine, silky, greyish pubescence.

♂. Head wider than prothorax, channelled down frons, which is roughly punctulate; mouth parts shining and with small asperate punctures, and marked off by a deeply impressed line; vertex with large rugose punctures; antennary tubercles prominent. Antennae thin and longer than body; basal joint suddenly inflated at apex and with a tubercle on its lower surface; third joint with a fascicle of black setae on its apex. Prothorax longer than wide; with four tubercles on the disc, and a larger one on each side; a strong transverse constrict-



tion at apical third; transversely rugulose. Elytra conjointly arcuate at base, shoulders rounded off but slightly elevated; wider than prothorax at base, narrowed to apex, there subtruncate; each elytron with six fine, lightly elevated carinae, counting suture and margin; finely granulate and opaque. Legs long and thin. Length, 11-18 mm.

♀. Differs in being larger, with shorter antennae, and in having the abdomen exposed beyond the elytra.

*Hab.*—Victoria: Launching Place (C. Oke), Warburton (J. E. Dixon, Oke).

This species is somewhat like *roei* in appearance, but is at once separated from that species by its armed antennae; the carinae on the elytra are also narrower and more numerous. Type in Coll. Oke. Paratypes in National and South Australian Museums and Coll. Dixon.

#### EARINUS VARIABILIS, n. sp.

Head, antennae, part excepted, meso- and metasternum and legs, base of femora excepted, black; prothorax, base of the third to eleventh joints of antennae and deflexed margins of shoulders pale yellow; base of clypeus, labrum, palpi, basal third of femora and abdomen ochreous-yellow; elytra dark blue, becoming purple towards apex. Five basal joints of antennae, prothorax, legs, under surface of head, sternum and abdomen thickly clothed with moderately long pale setae. Subopaque.

Head with medial sulcus from base to labrum; widely excavated between antennae; eyes deeply emarginate for antennae; with moderate semiconfluent punctures. Antennae thin, passing elytra; fourth joint shorter than third, fifth longer than third. Prothorax strongly transverse, with a constriction near base and apex; with a fairly large blunt tubercle on each side; disc slightly elevated on either side of centre and with a dark spot; punctures as on head. Elytra wider than thorax at base, not meeting towards apex, lightly emarginate on sides about apical third, obliquely rounded to the apices, which are themselves lightly produced; with two fine carinae on the disc of each elytron, becoming obsolete before apex, the base with indications of others; the shoulders lightly raised and nitid and impunctate; base with punctures as on head, becoming much finer before middle. Legs short, basal joint of tarsi not as long as next two combined. Length, 22 mm.; to end of elytra, 17 mm.

*Hab.*—Victoria: Whittlesea (C. Oke), South Australia (Blackburn's Coll.).

This species on a cursory examination appears to belong to *Bimia*, and the specimen in the South Australian Museum was in the Blackburn Collection queried as *Bimia*, but I think it should be referred to *Earinus*. The South Australian specimen is darker than the type, with the elytra a different shade of purple.

#### BIMIA BICOLOR White.

(= *B. femoralis* Saund., nec French.)

There is considerable confusion in Australia, but, as already pointed out by Blackburn, and by van de Poll, these two names belong to but one species. The confusion is really over the following species.

#### AKIPTERA WATERHOUSEI Pasc. ♂.

(= *Bimia maculicornis* v.d. Poll. ♀; = *B. femoralis* French (nec Saund.), ♂, ♀.)

In French's "Destructive Insects of Victoria" there are excellent figures of the sexes of this species. The male agrees perfectly with the figure given by



Pascoe. The female agrees with the description of van de Poll. There can be no doubt that these are the sexes of but one species. They have been taken together and bred from the same tree, but I have not heard of them actually mating. *Bimia* and *Akiptera* are very closely allied, the only difference is, apparently, in the antennae of the male.

ITHEUM VILLOSUM, n. sp.

Black, or nearly so. Thickly clothed with rather short, pale ashen-grey setae; in addition with numerous longer hair-like setae, these longest and most numerous on antennae, where they are somewhat reddish; on each elytron there are four lines of curved, white setae. The whole insect is closely punctate; punctures very fine on head, a little larger on prothorax and still larger on elytra.

Head channelled down centre. Antennal tubercles fairly prominent. Antennae reaching apical fourth of elytra. Prothorax elongate, a little wider near apex than base. Elytra one-fourth wider than prothorax at base, parallel-sided to near apex; apex lightly emarginate. Basal segment of posterior tarsi shorter and thinner than on *vittigerum*. Length, 5-7 mm.

*Hab.*—Victoria: Natya (C. Oke), Hattah (J. E. Dixon, C. Oke).

Similar to *I. vittigerum* Pasc. (for a specimen of which I am indebted to the late Mr. A. M. Lea) in shape, though generally narrower, but differs in colour of derm and clothing, in not having a pale vitta on each elytron, and the punctures sharper and deeper. From the description of *I. lineare* Pas. it differs in colour and the very different clothing. Taken in fair numbers on *Troidea irritans* R. Br. Types in Coll. Oke. Paratypes in Colls. Dixon, Nye, Lea and South Australian Museum.

ITHEUM ROBUSTUM, n. sp. Text-fig. 16.

Reddish-castaneous; head, some indefinite spots on thorax and elytra, femora, base of tibiae, the apex of fourth and most of the fifth to ninth segments of antennae piceous. Densely clothed with drab-coloured, decumbent pubescence; longer at apex of elytra; rather sparse on frons; and with rows of curved, white setae down elytra.

Head hollowed between antennae; with large, round, deep, close punctures. Antennae not quite reaching apex of elytra; segment 1 fusiform, 2 short, a little longer than wide, 3 longest, then gradually decreasing to apex. Prothorax longer than wide, subcylindrical; punctures larger and sparser than on head. Elytra elongate, widest at shoulders, which are rounded off, tapering to apex; with a well-marked subsutural stria and an elevated ridge down each elytron, and each with a lunate excision, a small, blunt spine on suture and a larger spine on outer edge; punctures as on pronotum. Legs of moderate length and fairly robust; claw joint long. Length, 9.50-10.50 mm.

*Hab.*—N. S. Wales: Dorrigo (C. Oke).

A large robust species with the general facies of *I. vittigerum* Pasc., but its larger size, coarser punctation and more shining derm will distinguish it. Type in Coll. Oke.

CHRYSOMELIDAE.

CRIOCERINAE.

AUSTROLEMA, n. gen. Text-fig. 17.

Elongate. Apterous. Head subvertical, rather small, transverse, constricted behind, a transverse sulcus between antennae. Eyes large, round, prominent,

notched near antennae; with moderate sized facets. Antennae widely separated at the base; reaching a little beyond base of prothorax; fourth segment longest; basal segments elongate, towards apex subquadrate. Maxillary palpi short, of three segments; first short, cylindrical, second subtriangular, third conical. Thorax subcylindrical, without sulci or lateral margins; deeply constricted on sides near base. Scutellum small. Elytra oblong, much wider than prothorax; punctate. Prosternum invisible between coxae; mesosternum short, produced into a sharp process between coxae; metasternum long, sulcate posteriorly. Abdomen with first segment as long as next two combined. Epipleurae moderately wide at base, gradually narrowing and vanishing near apex of elytra. Anterior coxae rather large, prominent, touching; coxal cavities closed behind; intermediate placed in a slightly oblique position, lightly separated; posterior transverse, a little wider apart than intermediate. Legs fairly long. Femora moderately robust, unarmed. Tarsi broad, thickly spongiöse beneath; segment 1 short, 2 transverse, 3 subcircular, 4 one and a half times as long as 3, thin; claws free at base and strongly appendiculate.

This genus is proposed for a peculiar looking little insect, somewhat resembling the genus *Lema*, though smaller and flatter than any species of that genus known to me.

In the table of genera given in the "Genera Insectorum" of Crioceridae, it would fall next to *Sigrisma*, as the antennae only just pass the base of prothorax, but the antennae of that genus are otherwise very different from the present genus, and, presumably, its claws are simple. The eyes of *Austrolema* have a deep V-shaped notch at base of antennae in an otherwise round and strongly convex surface.

Genotype, *A. vitinea*, n. sp.

AUSTROLEMA VITINEA, n. sp. Text-fig. 17.

Reddish-flavous; appendages flavous, antennae towards apex darkened; a round, median spot and a small part of apex on each elytron pale watery flavous; and the following markings black or nearly so: a broad stripe down head and pronotum, an elongate spot behind each eye, a narrow stripe on sides of pronotum and a blotch near base of each elytron. Well clothed with fairly long, fine, depressed, whitish setae, a few longer ones standing out on sides of prothorax and elytra. The whole upper surface finely shagreened.

Head depressed on either side of middle between eyes and leaving a short ridge in centre; with rather small, distinct punctures. Antennae with segment 1 cylindrical, curved, 2 oval, 3-5 elongate, 4 longest, 6-10 subquadrate, 11 shortly conical. Thorax suddenly widened and rounded on the sides about the middle, behind which there is an oblique notch; with fairly large, almost reticulate, punctures. Elytra oblong, lightly widened at apical third; with punctures a little larger than on prothorax. Under surface with fine, close punctures. Length, 3-3.5 mm.

*Hab.*—Victoria: Mitchell Gorge (E. Nye, C. Oke).

The black markings on the head and pronotum seem to be constant, but on the elytra the subbasal mark varies; it never touches the suture or sides, and only very narrowly the base near the scutellum, it spreads back to the pale median spot and generally stops there, though it sometimes passes beyond. On some specimens the elytral marks are sharp and clearly defined; in others they gradually merge into the paler shades.

An interesting little species, of which a few examples were obtained as the result of much energetic beating of climbing vines. Types in Coll. Oke. Paratype in Coll. Nye.

## DONACINAE.

## MICRODONACIA TERRICOLA, n. sp. Text-fig. 18.

Pale testaceous, fifth to eleventh segment of antennae infuscated. Under surface with minute pubescence, longer and more conspicuous on legs and antennae.

Head with a few large, deep, round punctures. Antennae long; segment 1 longest and thickest, 2-3 subequal, 4 longer, 5-11 subequal. Prothorax transverse, sides finely margined; with large, unequally distributed, round punctures. Elytra elongate, much wider at base than thorax, strongly narrowed to apex; striae with fairly large close punctures, interstices flat and smooth. Under surface with small, close punctures. Metasternum rather deeply notched behind. Legs fairly long; femora lightly inflated, anterior and intermediate each with a small sharp tooth, posterior with two slightly larger teeth opposite one another on the edges of the lower surface. Length, 3-3.50 mm.

*Hab.*—Victoria: Emerald (C. Oke), on the ground amongst grass.

This species is referred to *Microdonacia* with some doubts, as the prothorax is finely margined on the sides, but it agrees with the other characters given, and is close to *M. incerta* Bl., from which it differs in the fourth segment of antennae being shorter than the first, instead of longer, the punctures of pronotum not rugulose, and the tooth on front femora being the same as on intermediate and not obsolete. Type in Coll. Oke.

## CRYPTOCEPHALINAE.

## BRACHYCAULUS MINOR, n. sp. Text-figs. 19, 20.

♂. Parts of pronotum and elytra, base and central vitta on head, and sternum, blackish-brown; three spots on pronotum, scutellum, an obovate, post-scutellary mark (enclosed by carinae) and two spots (on carinae) on base of elytra of a dark golden-brown; rest of head, apex of pronotum, an interrupted, arcuate, post-median fascia and apex of elytra a brighter golden-brown; abdomen pale yellow; legs and antennae dingy-yellow.

Head with an impression down centre from base to centre of eyes, a transverse impression on clypeus. Eyes with an oblong excision in front. Antennae, when drawn over head, reaching base of prothorax; segment 1 long and curved, 2 small, transverse, 3, 4 equal, thin, 5 a little thicker, cylindrical, 6-10 about same length, but widened on inner edge, 11 a little longer, pointed. Prothorax transverse, strongly rounded in front, lightly bilobate on sides; disc raised into two strong elevations; with close, small, rugose punctures. Scutellum longer than width at base, not visibly notched at base, truncate at apex, where it is well elevated. Elytra with five more or less interrupted carinae on each elytron; whole surface finely granulate and with some indistinct punctures between carinae. Legs short and fairly thick; claw joint of tarsi short but distinct beyond the fourth. Apical segment of abdomen with a small shallow impression.

♀. Differs from the male in being larger and of a paler colour; the only blackish marks being behind the elevations on prothorax and partly outlining some yellowish marks which, with the scutellum, form a trident; the colour of the elytra is a pale rusty-brown with a wide medial yellowish fascia, and



some spots on the carinae. The sculpture of the head and pronotum is the same as the male, but on the elytra there are three rows of sharp, moderate-sized punctures between the carinae. The antennae differ in being shorter, with segments 7-10 short and subquadrate. Apical segment of abdomen with a large, deep, foveate impression. Length, ♂ 2.70 mm.; ♀ 3.50 mm.

*Hab.*—Victoria: Inglewood (C. Oke, J. E. Dixon); Sea Lake (J. C. Goudie).

The smallest species so far described, being smaller than *B. posticalis* Lea, from which it is distinguished, *inter alia*, by its glabrous surface. The females resemble miniature specimens of *B. klugi* Saund., but differ in the antennae and scutellum. Types in Coll. Oke. Paratypes in South Australian Museum and Colls. Dixon, Goudie and Lea.

#### CHRYSOMELINAE.

##### EUGASTROMELA.

The species of this genus, though widely spread in Victoria, are rare beetles. The imagines are always found on the ground, either under cover or, more often, in moss.

Mr. Lea in his description of the genus says: "Glabrous except for antennae and tarsi." This is certainly not correct for the three Victorian species. They all have the under surface clothed with short, pale pubescence and the apices of the tibiae have a conspicuous patch of reddish silky pubescence.

To ascertain if the genus is really apterous, as presumed by its author, I have examined both sexes of *metasternalis* and *flavitarsis* and the male of *abdominalis*. and have found all specimens examined to be without wings.

##### EUGASTROMELA FLAVITARSIS Lea. Text-fig. 21.

♂. Differs from the ♀ in having the basal segment of anterior tarsi much larger and the metasternum depressed, with a short, semicircular carina on its apex. The basal segment of abdomen is lightly convex and the apical segment is impressed.

*Hab.*—Victoria: Ringwood, Belgrave, Gembrook, Traralgon, Moe (C. Oke).

Two specimens (♂, ♀), now in the South Australian Museum, were taken together at Moe, in moss on the ground, and as they are slightly immature in colour, I presume that they bred there, or, at least, completed their metamorphosis there. Allotype ♂ in Coll. Oke.

##### EUGASTROMELA ABDOMINALIS, n. sp.

Black; coxae and trochanters reddish; femora and tibiae diluted with red; antennae, labrum and palpi testaceous. Under surface, legs and antennae with very short, pale pubescence.

♂. Head with a sinuate impression near each eye running into the semicircular impression around the clypeus. Antennae with segment 1 thick, about three times as long as 2, 2 smallest, 3 longer than 4, 4-5 equal. Prothorax transverse, laevigate; with a row of elongate punctures on posterior margin. Elytra with eight uneven rows of large punctures and six obtuse tubercles on each elytron. Metasternum with a fine carina between intermediate coxae and with a semicircular carina from coxa to coxa, reaching the apex of the sternum in its centre, the space behind depressed. Abdomen constricted across middle; basal segment with a transverse impression, making the segment appear as though it were two segments.



♀. Differs in having the metasternum convex and without apical carina, and the basal segment of anterior tarsi narrower. Length, 4 mm.

*Hab.*—Victoria: Whittlesea, Killara, Warburton (C. Oke).

The basal half of the first abdominal segment is on a higher plane than the apical, and on the type (from Whittlesea) this is traversed by three fine lines, but on the specimen from Warburton there is only one line and the carina on metasternum is not so elevated. The specimen from Killara is a female and, though the basal half of the first segment is raised, it is without these fine lines, but has the transverse impression which makes the segment appear as though it were two. The elytron, though it has as numerous swellings, with the seriate rows of punctures "pushed" out of line as on *metasternalis*, has fewer conspicuous tubercles than that species. Types in Coll. Oke.

GEOMELA GABRIELI, n. sp.

Upper surface black or nearly so, with testaceous markings; sternum, front angles of prosternum excepted, reddish testaceous; anterior angles of prosternum, abdomen, epipleurae, legs and base of antennae flavous; antennae towards apex infuscated. Glabrous. Nitid.

Head with minute punctures; clypeal suture curved, foveate at the sides; an elongate fovea above each eye. Antennae of moderate length, segment 3 scarcely as long as 4-5 combined, 7-11 widened, 11 not much longer than 10. Prothorax more than three times as wide as long; with moderate-sized, unevenly distributed punctures. Elytra with rather small, but very distinct punctures in the vague striae; interstices flat and almost impunctate. Epipleurae rather wide at base, terminating just before apex, with some rather feeble, transverse impressions. Under surface with fine, close punctures. Abdominal lamellae narrow, strongly rounded behind. Length, 2.65-2.80 mm.

*Hab.*—Victoria: Lorne, in moss (C. Oke, and in moss received from Mr. C. J. Gabriel).

Very similar to *G. parvula* Wilson in size and outlines, being more rounded than *G. blackburni* Lea, but differs from that species by its colour and markings, in its stronger punctuation of pronotum and sparser punctures of interstices.

The markings on the upper surface are hardly alike on any two specimens. But, taking the ground colour as black, the testaceous markings are labrum; on pronotum: a large medio-basal blotch and, generally, its anterior angles, but on two specimens, nearly the whole surface; on elytra: a narrow lateral margin, a broad sutural stripe, covering the suture and second striae from base to apical slope, where it is widened into a transversely placed oval blotch, and there is a light spot on the base of the fourth interstice, though it is sometimes continued as a stripe for about a quarter of the length of the elytra. I have much pleasure in naming this species after Mr. Gabriel, who has been very kind in obtaining moss for me from Lorne and other localities. Types in Coll. Oke. Paratypes in Colls. South Australian Museum, Dixon, Lea, Nye.

GEOMELA PARVULA Wilson.

There are several specimens of this species before me, including two that were identified by Mr. Wilson as his species, all from moss in the Dandenong Ranges. These show that the species varies slightly in its brownish markings, particularly in regard to suture and base of elytra, which, in some specimens, require a close scrutiny to detect. There is also a slight brassy gloss on upper surface, not mentioned in the description.

The species was described as a *Chalcolampra*, but it certainly belongs to *Geomela*, and is close to the species described above. Its front coxal cavities are open behind and its tarsal claws, although slightly swollen and faintly angulate at base, are not armed. The abdominal lamellae are rather narrow and strongly rounded behind.

## GALERUCINAE.

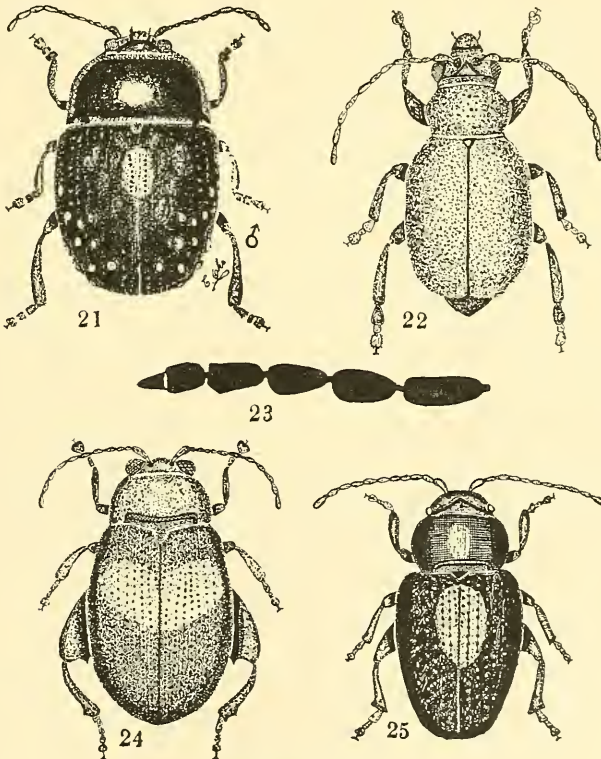
## NEORUPILIA FUSCA, n. sp. Text-fig. 22.

Obscure yellowish-brown, apex of sixth to eleventh segments of antennae infuscated.

Head with a transverse, impressed line between the back of the eyes; between this line and the antennal ridges is a triangular fovea. Antennae long and thin, reaching hind coxae; all segments elongate. Prothorax transverse, strongly rounded on the sides, widest in front of middle; with very fine close punctures. Elytra short, leaving apex of abdomen exposed; with rather fine, close punctures and very fine, short, sparse pubescence. Length, 2.50 mm.

*Hab.*—Victoria: Belgrave (C. Oke).

A smaller and darker species than *N. flava* Lea and with different punctures. Type in Coll. Oke.



Text-figs. 21-25.

21.—*Eugastromela flavitarsis* Lea, ♂. 22.—*Neorupilia fusca*, n. sp. 23.—*Tomyris intermixta*, n. sp. Antenna of male. 24.—*Arsipoda montana*, n. sp. 25.—*Hyphallicoda caesita*, n. sp.

## EUMOLPINAE.

## TOMYRIS INTERMIXTA, n. sp. Text-fig. 23.

Dark metallic bronze-purple with fiery reflections; legs, labrum and first four segments, and bases of fifth to eighth segments of antennae testaceous; tarsi, palpi and rest of antennae piceous; under surface dull brassy-green. Rather densely clothed with short, whitish pubescence, intermixed with rows of longer, blackish setae.

♂. Head with fine reticulate punctures. Antennae long, segment 1 thick and curved, 2 short, subglobular, 3-4 equal, 5 longest, 6-7 equal, obconic, 8-10 increasing from base to near apex on inner edge then obliquely cut away, 11 longer than wide, 12 short, conical. Thorax strongly transverse, rounded on sides, widest behind middle, strongly bisinuate at base; basal margin unusually distinct; punctures a little coarser than on head. Elytra with shoulders prominent; striae indistinct; surface subgranulate, more noticeable on basal third. Posterior tibiae deeply notched near apex. Apical segment of abdomen notched in middle; basal segment raised down centre, though scarcely carinate. Length, 6.50 mm.

*Hab.*—Victoria: Anakies (C. Oke), unique.

This species will be easily distinguished by its large size, clothing and antennae. Most of the elytra and centre of pronotum is dull, but the rest of the surface is shining. Type in Coll. Oke.

## HALTICINAE.

## ARSIPODA MONTANA, n. sp. Text-fig. 24.

Reddish-testaceous; antennae, four basal joints excepted, base of head and some indistinct marks on pronotum infuscated; elytra, a large transverse, medial plaga and apex excepted, black. Nitid.

♂. Elongate-oval. Subdepressed. Head smooth, interocular impression very feeble, with supra-orbital foveae. Antennae reaching hind coxae; lightly thickened towards apex; with segment 1 moderately long, curved, thickened to apex, 2 short, 3-10 cylindrical, subequal in length, 11 a little longer. Prothorax transverse, lightly narrowed in front; distinctly margined all around, the anterior angles suddenly widened; with a strong transverse impression near base, ending one-fifth before sides and turned sharply back to base; with very fine close punctures. Elytra elongate, seriate-punctate, the punctures rather small and closely set; the interstices flat, with fine, close punctures; shoulders raised and smooth. Abdomen constricted across middle, apical segment emarginate. Posterior tibiae with a small tooth near apex, behind which is a feeble notch; apex with a sharp dark tooth.

♀. Differs in being larger and in having the abdomen convex beneath, with its apex rounded. Length, 4.25-5 mm.

*Hab.*—Victoria: Beechworth (C. Oke), Mt. Buffalo (F. M. Burnet); N. S. Wales: Mt. Kosciusko (C. Oke).

A very distinct species, which in Blackburn's table would fall between *A. podontioides* Bl. and *A. aenescens* Bl., from both of which it differs by its colours. It is also distinguished from the former by its shape and the sculpture of the pronotum, and from the latter by its smooth head. Types in Coll. Oke. Paratypes in Coll. Burnet.



## ARSIPODA METALLICA, n. sp.

Black, with dark blue reflections in parts; base of head and pronotum metallic bronze; elytra metallic green with bronze reflections; tarsi and five basal joints of antennae testaceous. Nitid. Dorsal surface glabrous, ventral and antennae with fine, pale, silky pubescence.

♂. Head transversely impressed between eyes. Eyes large, very convex, facets coarse. Antennae passing hind coxae; segment 1 stout, same length as 5, 2 short, 3-4 longer, equal, 5-7 a little longer, 8-10 shorter, 11 acuminate and appearing to be of two joints. Prothorax transverse, apex truncate, base strongly bisinuate, sides obliquely narrowed to apex; finely margined all around, lateral lightly explanate and feebly reflexed; with an arcuate, transverse line near base, ending in an elongate fovea at either end; with fine close punctures. Scutellum small, rounded behind, smooth. Elytra with scutellar striole and ten, including the marginal, striae of moderate-sized punctures, the sixth and seventh interrupted by the shoulders and not reaching the base; interstices flat and with very fine punctures. Abdomen and legs with fine punctures. Apical segment of abdomen sinuately emarginate.

♀. A little wider than the ♂, with the apex of abdomen rounded. Length, 5 mm.

*Hab.*—Victoria: Ringwood, Fern Tree Gully, Killara, Warburton (C. Oke).

Of the size of *A. detersa* Bl., but the line at base of pronotum very distinct (absent in *detersa*), also colour different. In Blackburn's table it would be associated with *A. concolor* Bl., from which it differs in being broader and flatter, in the colour and the impression on head different, and in having the hind femora more strongly developed. The colours are constant in all the examples I have examined. Types in Coll. Oke.

## HYPHALTIKODA, n. gen.

Body oval, convex; finely pubescent; winged. Head transversely sulcate between eyes. Eyes round, prominent, facets rather fine. Antennae of eleven segments; rather close together at insertion; filiform; reaching hind coxae in male, shorter in female; third segment shorter than adjacent ones. Prothorax transverse, very finely margined all around; with a transverse sulcus near base, turned down to base at each end, some distance from margin. Scutellum small, rounded behind. Elytra a little wider at base than prothorax; seriate-punctate; finely margined to near apex; epipleurae moderately wide at base, becoming obsolete at apical fourth. Prosternum narrowly carinated between coxae; meso- and metasternum short, meta- slightly longer than mesosternum. First segment of abdomen longer than next three combined, 2-4 equal. Legs of moderate length; posterior femora inflated, convex below, channelled on inner edge; all the tibiae with a small mucro in the usual position.

This genus falls beside *Hyphaltica* in Blackburn's table (*Trans. Roy. Soc. S. Aust.*, xx, 1895), from which genus it is distinguished, *inter alia*, by the mucro of the intermediate tibiae being exactly as on the other legs, and the posterior femora being convex beneath and distinctly channelled on the inner edge.

*Genotype*, *H. caesita*, n. sp.

## HYPHALTIKODA CAESITA, n. sp. Text-fig. 25.

Dark blue; legs and antennae black with a bluish gloss; coxae and tarsi diluted with red. Upper surface glabrous, under surface with very fine, short, pale pubescence. Nitid.

♂. Head with an arcuate impression from back of either eye and meeting in front, just behind antennae. Antennae with the basal segments thin, becoming thicker towards apex. Thorax strongly rounded on the sides, a little wider at base than at apex; with very fine, microscopic punctures. Elytra obovate; seriate punctures small and fairly close together, interstices with fine punctures. Sternum and abdomen with moderate punctures. Abdomen lightly constricted across middle; apical segment incurved on apex, subapical with a shallow fovea.

♀. Differs in having shorter and thinner antennae, and the abdomen convex, with the apex rounded. Length, 2 mm.

*Hab.*—Victoria: Frankston (C. Oke). A very pretty little dark blue species found in fair numbers on, or mostly on the ground under *Amperea spartioides*.

The punctation of the pronotum is exceedingly fine and might easily escape observation, while the punctures of the elytra between the seriate rows, though fine, are easily seen. Type in Coll. Oke.

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